

Urban Water Conservation Strategy - Objectives and Mechanisms

INTRODUCTION

One of the primary objectives of the CALFED Bay-Delta Program (CALFED) is to improve water supply reliability. This can be accomplished by increasing supply (through new conveyance and storage) or by reducing demand (through conservation and demand management). The measures developed by CALFED will probably include both of these aspects.

One method to help reduce demand is to increase the level of urban conservation beyond what exists today and beyond what is expected in the near future. Urban water conservation efforts have been expanding for the last two decades and continue to expand. Many of the more recent efforts have resulted from many urban water agencies signing the 1991 *Memorandum of Understanding Regarding Urban Water Conservation in California* (MOU) and beginning to implement BMPs as outlined in the MOU. Efforts to reduce urban demand are projected to continue well into the next century, creating a potential for saving hundreds of thousands of acre-feet annually. However, the rate and level of implementation by signatory agencies is far below the potential. In addition, many agencies have yet to sign the MOU or, in any way, develop strong conservation programs. Much greater levels of conservation can and need to be achieved.

OBJECTIVES OF CONSERVATION STRATEGY

To increase the level of conservation, a common program addressing water use efficiency is included as part of the CALFED alternative solutions. This water use efficiency program will help ensure that cost-effective water use efficiency measures are implemented throughout the Bay-Delta watershed and export areas. A sub-component of this program specifically addresses the urban aspects of water conservation. To achieve the desired results of the common program, the approach to urban water conservation should meet the following objectives:

- **Preserve local flexibility** - During the CALFED scoping period and at numerous public meetings, the desire to maintain the flexibility of implementing conservation measures at the local level was stressed.
- **Ensure a strong conservation component in the Bay-Delta solution** - During the CALFED scoping period and at numerous public meetings, the public as well as stakeholders said conservation should play an integral role in the Bay-Delta solution.
- **Include the strengths and benefits of the CUWCC and the urban MOU** - The California Urban Water Conservation Council (CUWCC) has an established role in the urban water use community relating to the implementation of BMPs. The CUWCC consists of water agencies, environmental and public interest groups, and other interested

parties that have signed the *Memorandum of Understanding Regarding Urban Water Conservation in California* (MOU). The strengths of the CUWCC include: ability to foster collaboration among diverse urban agencies and the non-profit community; development of a framework for implementation of urban BMPs; the ability to update BMPs to reflect advances in technology and knowledge in the area of urban conservation; and its ability to allow a signatory agency to exempt itself from a specific BMP given proof of non-cost effectiveness.

- **Provide some type of assurance that a high “floor” level of conservation implementation will occur** - Nearly half of California’s larger urban water retailers , have signed the MOU and committed themselves to conservation. In addition, major water wholesalers have signed the agreement. However, for many signatories, BMP implementation rates are low and inconsistent. Additionally, many non-signatory agencies have yet to implement strong conservation programs. Establishment of a high “floor” level of conservation measure implementation will provide needed assurance that existing water supplies are being used efficiently before new supplies are made available through additional storage or improved conveyance.
- **Include both market and regulatory mechanisms** - Market mechanisms are characterized by use of incentives (or disincentives) offered to encourage water users to optimize the efficiency of their water use. Examples include low interest loans, tax credits, water pricing, and water markets. Regulatory mechanisms are characterized by use of laws, regulations, contract provisions, or other constraints implemented to prohibit inefficient uses or require efficiency measures.
- **Emphasize market mechanisms over regulatory mechanisms** - The use of regulatory mechanisms can cause defensive responses from urban agencies and inhibit the desired result of greater levels of water use efficiency. The use of regulatory mechanisms may be limited to that of an enforcement tool for agencies that do not respond to incentives or market mechanisms.
- **Achieve a higher level of BMP implementation, and by more agencies** - This is related to the establishment of a “floor” level of conservation and the need to ensure a strong conservation component. A higher level of BMP implementation would demonstrate the commitment to water use efficiency that will be an essential component of a Bay-Delta solution. Additionally, water savings from BMPs implemented by more agencies is necessary for added reliability in future water supplies.
- **Review Implementation of landscape water conservation BMPs** - Tremendous water savings potential exists with landscape water conservation. There may be significant opportunities for additional landscape conservation through market mechanisms, further public education, basing water rates on evapotranspiration or lot size, stronger enforcement of existing laws and regulations, or other measures. Implementation of landscape BMPs should be reviewed to better understand potential water savings and

mechanisms that can be used to achieve it.

- **Help agencies understand the value of conservation** - Many agencies fail to see the value of implementing conservation measures. This includes the value to their customers as well as the greater value to society and the environment. Some of the belief results from the lack of common language used to define demand projections and to determine potential savings from conservation savings. Use of integrated resource planning methods and common approaches to cost-effectiveness determinations will help agencies understand the value of conservation and make more educated decisions regarding implementation of such measures.
- **Offer help in financing conservation programs** - Many agencies want to implement conservation practices but are limited by their inability to secure access to capital funds. In addition, concerns of an agency over potential rate increases that would be associated with capital improvements leads to further lack of implementation. Providing assistance with financing of conservation programs can help minimize potential rate increases as well as provide an easily accessible source of capital funds.
- **Encourage the removal of disincentives** - Many water agencies and water users are discouraged from implementing conservation measures as a result of various disincentives. Disincentives can include poorly planned drought water allocation plans, negative impacts to agency operation budgets, as well as others. Removal of these disincentives can allow agencies and their customers to implement conservation measures that otherwise could not be justified.

MECHANISMS AVAILABLE TO MEET OBJECTIVES

There are many mechanisms available to assist in encouraging and promoting higher levels of conservation in the urban sector. Some of these are market based mechanisms while others are strictly regulatory. Many combinations of mechanisms could be formulated to meet the desired goals of the urban conservation component of the Bay-Delta solution. The mechanisms below are described in a manner similar to how they could be implemented. Strengths and weaknesses and a discussion of how the mechanism may work in combination with others, as well as examples of actual use of these mechanisms, are also included.

1. *Tool:* California Urban Water Conservation Council (CUWCC) - The CUWCC was established as part of the urban MOU. Originally envisioned to be a "watchdog" for the State Water Resources Control Board (SWRCB), the organization now acts as a conservation clearinghouse and brain trust of sorts for the signatory agencies. The CUWCC is comprised of representatives from urban water agencies as well as non-profit public interest groups, resulting in a fairly balanced group. Compliance with the requirements of the MOU is voluntary and therefore, participation in the CUWCC is also voluntary. This voluntary nature is viewed by urban water agencies as an attractive feature of both the MOU and the CUWCC.

Strength: ability to foster collaboration among diverse urban agencies and the non-profit community; development of a framework for implementation of urban BMPs; the ability to update BMPs to reflect advances in technology and knowledge in the area of urban conservation; and its ability to allow a signatory agency to exempt itself from a specific BMP given proof of non-cost effectiveness.

Weakness: lack of enforcing compliance among signatory agencies; difficulties in measuring and documenting water savings from BMP implementation; impracticality of asking water agencies to evaluate each other; and the inability of small agencies and non-profit signatories to participate in the process as fully as the larger urban agencies.

Use with other tools: Use of the CUWCC will integrate well with other tools, especially incentive programs, such as low interest loans. Authority provided through another governing body would be necessary in order for the CUWCC to be effective and reach the majority of urban water users. With the intention to maintain the volunteer nature of the CUWCC, compliance with implementation requirements would not occur without an enforcement authority to "step in".

Example of actual use: The CUWCC currently exists to aid in the implementation of BMPs by signatories of the urban MOU. The CUWCC can collect and analyze data related to BMP implementation and is working on methods to increase rates of implementation and awareness of conservation issues among the MOU signatories.

2. *Tool: Water Right Permit Conditions* - The State Water Resources Control Board (SWRCB) has the authority to grant and control water rights permits. When issuing new water rights permits, the SWRCB may place conditions on the permits to require such items as the completion of conservation plans or programs. Some water right permits with "reserved jurisdiction" clauses (started being used in 1960's), may also allow the SWRCB to initiate additional conditions on existing water rights permits using the justification of "changes in environmental conditions". However it has been very difficult to post-condition permits. Another type of condition could include variations in diversion restrictions during drought periods. For example, an agency not in compliance with necessary conservation criteria would have greater shortages during a drought period than would an agency that is in compliance.

Strength: permit conditions can result in successful conservation programs; conditions have a backing of authority to ensure compliance; can be very successful as part of all future water rights permits.

Weakness: some past permit conditions have been ignored with no enforcement action taken by the SWRCB; conditions may require increase in staffing at SWRCB to "police" conditions and to review increased compliance associated paperwork; there is a potential for increases in lawsuits brought on by water right holders; no precedence has been set where the SWRCB places additional conditions on long standing water rights, such as pre-1914; conditioning all water rights equally would be very difficult because of the extreme variation and complexity

of the rights; conditions would only affect right holder (wholesaler in some cases) and the SWRCB may not have authority to "police" retailers; conditioning water rights would be viewed as very intrusive by the affected water agencies; conditions may result in increased usage of groundwater and overdraft conditions.

Use with other tools: This tool would work well in conjunction with changes in the California Water Code and increased use of existing authority of the SWRCB regarding the definition of "reasonable use". Use of conditions on some water rights holders, such as the SWP and CVP may preclude or hamper use of similar contract provisions being placed on the end user. Conditions would not be affected by incentive type programs unless the condition stated that participation in incentive type programs (low interest loans) was not allowed if compliance with condition was not achieved.

Example of actual use: There are many examples of conditions being placed on recently approved water rights permits. One such example is the El Dorado Irrigation District. EID was required to develop and implement a comprehensive orchard conservation program as a condition of receiving approval on their permit application. This program is still in place and successful. In some other instances, conditions have been ignored or complied with only at a rudimentary level. During extreme drought conditions, the SWRCB has used its "reserved jurisdictional" clause to limit the diversions of some water rights holders, but this has never been initiated on a long-term basis.

3. *Tool:* Legislative Changes to State Water Code - The California Water Code prohibits the "waste or unreasonable use" of water. The laws within the Code are grounded in the belief that water diverted from natural streams must be put to "beneficial use" or the right to divert the water (or a portion thereof) is forfeited. In addition, the interaction between surface and groundwater is not legally well defined such that groundwater is perceived as "free" by most of water users. Using the legislative process, the Code would be amended to provide greater authority to the SWRCB (and other appropriate bodies) to better define "beneficial use" and establish legal definitions relating to the interaction between groundwater and surface water. Incentives such as exemptions from paperwork requirements or disincentives such as adjudication, can be used to encourage proper use and management of supplies.

Strength: mandated requirement to use water in most efficient ways feasible; all agencies would need to comply.

Weakness: would require more SWRCB staff to police and investigate beneficial use claims; could result in more lawsuits brought on by water rights holders; viewed as intrusive regulation by water rights holders; would probably result in adjudication of all groundwater basins and very regulated control of water use.

Use with other tools: Changes in the Water Code would work in conjunction with additional water rights conditions and increased authority of the SWRCB. Requiring certification and limiting access to financial and technical assistance might be hampered if changes in the

Water Code were made.

Example of actual use:

4. Tool: CVP/SWP Contract Provisions (or other condition of service) - The state and federal water projects have contracts with numerous agricultural and urban water purveyors to wholesale surface water. Under these contracts there may be provisions to encourage or require water conservation planning or programs. However, many contracts do not have provisions or the current provisions are simply not being enforced. There are at least three ways to include conservation provisions as a part of contract requirements. One method would be to simply include such provisions during contract renewals. A second would include the use of incentives, such as assurances or grant money, to allow contractors to renegotiate or agree to the addition of provisions into existing contracts. The third would be more universal and would include the use of legislative changes, such as CVPIA or the Reclamation Reform Act to include provisions across all existing and future contracts.

Strength: mandated requirement and all contracting agencies would need to comply.

Weakness: forced regulation that is not readily accepted by agencies; agencies will tend to satisfy conditions with least amount of effort and goals of conditions may not really be met; condition can affect first contractor of water (wholesaler) but authority to impose conditions on lower retail levels has not been clearly established (i.e., MWD customers).

Use with other tools: Contract provisions may be hampered if conditions are also placed through water rights provisions. Otherwise, contract provisions should not be adversely affected nor affect the use of incentive programs or other mechanisms.

Example of actual use: The CVPIA is an example of a legislated condition placed on water users. In the case of the CVPIA, only CVP contractors are affected. The Bureau's Reclamation Reform Act also required the completion of water conservation plans by each contracting agency. If a satisfactory plan was not completed, contract renewals were placed on hold. This policy prompted several agencies to work fast and produce conservation plans that were acceptable.

5. Tool: Low Interest Loans or other financial assistance - Low interest loans are financial incentives made available to water users to provide capital required for implementation of water conservation programs. Loans are provided at low interest rates to ease the burden of repayment while facilitating the early implementation of water conservation/management improvements. Other forms of financial assistance include grant money, revolving funds, and direct financing (funding agency pays directly for a particular project). Low interest loans or other financial assistance could be made available through state or federal agencies to local water purveyors or possibly individual water users. Conditions could be placed on the applicants to require conservation plans or other items prior to loan or grant approval.

Strength: low interest rates and ease of availability of funds; application is relatively easy to complete; justification for funding is straightforward.

Weakness: if conditions are included some applicants may not apply.

Use with other tools: Other tools are not particularly precluded if this tool is used. However, other tools may work well with this one. Stipulations for acquiring funds could be required that would include a greater commitment to conservation, such as requiring an agency to be signatory to the MOU and have an approved plan to implement BMPs. It is not likely that the addition of stronger stipulations, such as a minimum level of BMP implementation, would effect further commitment by agencies to conservation. Rather, stronger stipulations would tend to turn agencies to other funding sources or discourage agencies from implementing programs. Additional "sticks" could be included through an MOU certification process. If certification is not maintained, penalty fees or SWRCB action could result. The use of minor stipulations would act more as a slight incentive to, for example, join the MOU process.

Example of actual use: The Water Conservation Bond Law (Proposition 82) was passed by voters in 1988 and is an example of a successful loan program. It authorized DWR to sell \$60 million of general obligation bonds for low-interest loans to local agencies for both water conservation projects and groundwater recharge. The program has been very successful to date, loaning nearly \$15 million annually. Requirements to receive a loan, however, do not include the necessity for the applicant to have achieved a certain level of conservation, have a BMP implementation plan, or even be a signator to the urban MOU.

6. *Tool: Tax Credits and Rebate Programs* - Tax credits would be developed by the Franchise Tax Board for installation of particular conservation devices such as low flow shower heads and toilets. Individuals or agencies would be given a credit on their taxes for each device installed. Rebate programs are designed to pay individuals a sum of money after installation of a device. The money from rebate programs usually is from the local water agency (with help from the wholesaler, as is the case with MWD). The savings in reduced water use helps to offset the cost to the agency.

Strength: rebate programs are popular, particularly when action associated with rebate is required or encouraged.

Weakness: tax credits are viewed as an annoyance by the Franchise Tax Board; tax credits may be used primarily by affluent people and not lower income people; tax credits are cumbersome to administer and difficult to modify.

Use with other tools: use of other tools would not be precluded if tax credits were developed.

Example of actual use: Toilet replacement programs required by the urban MOU can be fulfilled if water agencies provide up to \$100 rebates to individuals who have installed ultra low-flow toilets. This rebate program has been very successful except in lower income areas.

People with lower incomes tend to not be able to afford the up-front cost of installing a new toilet prior to getting the rebate. New programs in Los Angeles Department of Water and Power and in Contra Costa Water District are working with homeless and low income residents to replace toilets at no cost to residents. Funding is partially provided through the Bureau of Reclamation.

7. Tool: Technical and/or Planning Assistance. - Technical or planning assistance from government agencies would be made available to urban agencies for items such as developing conservation programs, completing integrated resource planning, and determining cost-effectiveness of conservation measures. Planning assistance may be made available at no cost to the agency as an incentive to evaluate and implement conservation measures. Assistance could also be made through grants or cost-sharing with non-governmental technical experts.

Strength: low- or no-cost technical assistance to agencies; helps provide uniformity in conservation methodology; theoretically adds temporary staff to an agency to help complete necessary investigations/planning;

Weakness: flexibility of choosing technical experts may be limited to only state and federal staff or approved non-governmental experts; limitations in the number of staff available for assistance can delay the timeliness of assistance.

Use with other tools: the use of this mechanism does not prohibit the use of other mechanisms nor is it hampered by the use of others.

Example of actual use: Both the Bureau of Reclamation and Department of Water Resources offer technical assistance through their water conservation offices. This technical assistance is limited because of staff and budget limitations. These agencies also provide funding for outside organizations to perform technical assistance to agencies (e.g., the Irrigation and Training Research Center at Cal Poly is funded by the Bureau to assist agricultural districts in conservation measures and planning).

8. Tool: Water Use Tax or Non-Compliance Fee - A fee would be established that would require payment of a tax or fee by an agency per acre-foot of diversion or delivery. One form of such a fee would apply to all users. It could act as a price incentive to induce conservation. The higher the price paid for water, the more efficiently the water diverted will be used. A second approach would involve only charging a users fee for agencies not in compliance with particular stipulations, such as a level of BMP implementation. This second approach could be viewed as a penalty fee for non-compliance. Funds derived from either method could be used to develop a revolving fund to help finance conservation projects, or to fund environmental restoration programs designed to reduce the impacts of water diversions..

Strength: Price based incentive to implement conservation measures; penalty for non-compliance provides "teeth";

Weakness: tax on all users to promote conservation would be viewed as too regulatory and may complicate other potential user tax for other aspects of a Bay-Delta solution; may result in lawsuits regarding authority to charge fees, etc.; users may revert to groundwater to reduce the effect of any tax.

Use with other tools: A user tax would work independently of other mechanisms. Use of a penalty fee would work in conjunction with conditional mechanisms such as contract provisions or certification requirements.

Example of actual use: The CVPIA included a tax on CVP contractors for each acre-foot diverted to fund an environmental restoration program.

9. Tool: Bond Pooling - Bond pooling is a method of financing conservation projects by joining several agencies together under one bond issuance. Two kinds of bond pooling are available. The first would group specific projects for a specific amount of money. The second would secure an amount of money for a specific group of agencies but would not contain specific projects. Agencies would apply for loans out of the pool similar to a revolving fund program. The benefits for agencies in a bond pool include slightly lower bond rates, better bond ratings, reduced bond issuance costs, and the ability to separate the debt from other financial aspects of the agency. Bond pools are generally available through associations but only to member agencies (i.e., ACWA's pooled financing program is only available to ACWA members).

Strength: ability to gain lower bond rates and reduction in issuance costs (result of spreading issuance among several agencies); can help obtain lower costs for some conservation products (low flow shower heads) because of increased buying power; reduces the effort to gain capital financing for small agencies that are unfamiliar with financing; associations offering bond pooling tend to look after the best interest of their members and therefore provide a comfort level to agencies that might not be present if the agency self finances or goes through another source.

Weakness: process of obtaining enough applicants to receive a reasonable bond rate typically takes more than a year; discourages many agencies that need capital much earlier and do not wish to wait; availability of bond pooling is not well understood or known by some water agency managers or staff; bond pools are generally available only to member agencies of the particular association operating the pool; bond pools are only convenient for capital projects in the \$1 to \$5 million per project range; many large water agencies have larger capital needs and can finance on their own.

Use with other tools: Bond pooling would work independently of other mechanisms and does not preclude the use of other tools. In combination with conditional mechanisms, access to bond pooling could be used as an incentive.

Example of actual use: FARECAL is one example of a pooled financing program that has issued at least one bond. FARECAL is operated under a Joint Powers Authority by the

California Municipal Utilities Association (CMUA). To date, only one bond has been issued, but a second one may occur in the near future. However, CMUA is experiencing trouble gaining enough interest and applications. A second example of a pooled financing program is one operated by Association of California Water Agencies (ACWA). The WaterReuse Association also has a bond pooling program for its members. The California Special Districts Association (CSDA) has had a very successful pooling program that has bonded \$350 million since 1988. The success of the CSDA bond pool is attributed to the small size of member agencies who are not experts in financing and do not necessarily have large projects.

10. Tool: Water Shortage Contingency Planning - Water shortage contingency plans are already required pursuant to the California Water Code, Section 10631e. These plans generally include plans for rationing water during shortages. The rationing programs that are easiest to implement are those that reduce water allocations by a set percentage. This tends to penalize users who have already implemented conservation measures. Rationing that bases water allotments on needs is more equitable, but may be more difficult to design and administer. Appropriate planning assistance and enforcement can improve water shortage contingency planning.

Strength: provides up-front information to retailers and end users prior to water shortages occurring; encourages *equitable* shortage allocations; removes disincentive.

Weakness: equitable rationing is more difficult to design and administer.

Use with other tools: Enforcement may be a necessary part of this tool and therefore, coupling the use of this with other requirements may be appropriate. The use of this tool does not preclude the use of other tools.

Example of actual use: Water shortage contingency plans are required for participation in the state's Drought Water Bank and are also required as part of Urban Water Management Plans (submitted every 5 years by all urban water purveyors).

11. Tool: Drought Water Bank Conditions - Conditions would be placed on agencies wanting to participate in the state's Drought Water Bank (Bank). These conditions could state that the Bank will not make water available to any urban areas unless the water supplier in that area is implementing BMP's according to the MOU. More stringent conditions could be included to further encourage high levels of conservation. Agencies that do not meet the requirements may either not be able to receive Bank water or may have to pay an additional premium for the water delivered (i.e., surcharge)

Strength: acts as an incentive for agencies to implement conservation; not extremely difficult for agencies to comply.

Weakness: requires an additional step to assure agency compliance prior to making water available when time is of the essence (drought periods).

Use with other tools: Limited access on the availability of Bank water would work well with a certification process. Conditions would generally not hamper the use of other tools since desire for Bank water would be a decision made by individual districts according to their own supply/demand situation.

Example of actual use: The Drought Water Bank, as stated in the 1993 Program EIR, requires that urban agencies be implementing BMPs according to the schedule in the MOU in order to take delivery of Bank water.

12. Tool: Conditions for Transfers of Marketed Water - Agencies wishing to buy water through transfers would be subject to conditions prior to approval of the transfer. Conditions could include requiring the receiving agency to be a signator to the MOU, have an adopted and implemented conservation plan, or other conservation based conditions. A priority system for approval of transfers may be given to agencies who have met the conditions. Currently, transfers between agencies need to be approved by the SWRCB, the SWP, and/or the CVP depending on the water being transferred and the facilities being used to transfer. Pre-1914 rights are not subject to approvals and typically would not be on the receiving end of transfers. Conditions would not be placed on the transferring agency since approval of a transfer already requires proof of conserved or saved water.

Strength: acts as an incentive for conservation; uses market pressure to gain compliance

Weakness:

Use with other tools:

Example of actual use:

13. Tool: Conservation Certification Process - Legislation would be passed that would require all urban water agencies (wholesalers and retailers) to be certified by an approved certification body. Certification (maybe every 2 to 5 years) would only be granted to an agency if they have 1) developed a conservation plan outlining implementation of BMPs appropriate to their local conditions, and 2) implementation is occurring at or above the rate described in their plan. Failure to maintain a rate of implementation would result in loss of certification. A requirement to sign the current or a modified urban MOU may also be included. Certification could be coordinated with submittal of urban water management plans, which are required every five years. The authority to certify could be given to the SWRCB or DWR, either of which may want to use an outside source such as the CUWCC to perform agency evaluations. The CUWCC could provide its evaluations of the individual water agencies to the SWRCB or DWR for certification. Evaluation would be based on measurement of an agency's progress of BMP implementation against their approved plan. Plans would not be approved if they do not show an concerted effort on the part of the agency to adopt conservation measures.

Strength: retains flexibility at the local level; works well with other mechanisms; would

result in greater implementation of BMPs; non-compliance can be used to limit access to other mechanisms.

Weakness: requires additional staff and funding to evaluate and certify agencies; difficulty in objectively evaluating all agencies; potential for lawsuits if agency is not certified; difficulty in achieving objective certification: in the past, DWR has been reluctant to criticize agencies for failure to implement conservation programs and the SWRCB has failed to enforce its own permit conditions.

Use with other tools: A certification process would work well with other mechanisms that act as incentives for maintaining compliance. Certification could entitle an agency to low interest funding or other financing options, including bond pooling, provide access to technical and planning assistance from state and federal agencies, and provide priority in the drought water bank and ease approval of other water transfers. Failure to remain certified could result in loss of access for the agency to financing and other assistance and possibly a return to higher interest rates if low interest financing was already obtained. In addition, non-certification could exclude an agency from participation in the drought water bank or perhaps require the payment of an additional penalty fee for drought bank water. Non-certification could also result in penalty fees being assessed to the agency (e.g., \$5 per acre foot) for all water delivered. Such a penalty fee could be used to fund a revolving fund.

Example of actual use: Examples of certification or licensing process exist in many other utility markets. Wastewater treatment plants need to comply with NPDES permit requirements or lose their discharge license, power generation facilities need to maintain FERC requirements, and cities or towns need to maintain FEMA requirements or risk losing subsidized insurance rates. These are all examples of a type of certification. Requiring water purveyors to be certified or to risk penalties and lose access to other benefits is not much different than some of these requirements. As envisioned however, conservation certification would not need to be as stringent or require as many reports, etc. Instead, certification may be granted for multi-year period (not to exceed 5 years) and reports would only have to be completed prior to the next period of certification.

As shown above with the 13 mechanisms, there are numerous tools available to help meet the objectives of an urban conservation strategy. The matrix in Table 1 is included to allow for comparison of the various mechanisms to see how they may meet the stated objectives.

Table 1 - Comparison of Mechanisms to Objectives

| Objective | Available Mechanisms (see key below) | | | | | | | | | | | | |
|--|--------------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 1 Preserve local flexibility | ✓ | | | | ✓ | ✓ | ✓ | * | * | ✓ | * | * | ✓ |
| 2 Ensure a strong conservation component in the Bay-Delta solution | | ✓ | ✓ | ✓ | | | | ✓ | | | | | ✓ |
| 3 Include the strengths and benefits of the CUWCC and the urban MOU | ✓ | | | | | | | | | | | | ✓ |
| 4 Provide some type of assurance that a high "floor" level of conservation implementation will occur | | ✓ | ✓ | ✓ | | | | * | | | | | * |
| 5 Include both market and regulatory mechanisms | | | | | ✓ | ✓ | | ✓ | ✓ | | ✓ | ✓ | ✓ |
| 6 Emphasize market mechanisms over regulatory mechanisms | ✓ | | | | ✓ | ✓ | ✓ | | ✓ | | | | ✓ |
| 7 Achieve a higher level of BMP implementation, and by more agencies | * | ✓ | ✓ | ✓ | * | * | * | ✓ | * | | * | * | ✓ |
| 8 Strengthen implementation of modified landscape water conservation BMPs | ✓ | | | | * | ✓ | * | | | | | | * |
| 9 Help agencies understand the value of conservation | ✓ | | | | * | | ✓ | | | * | | | |
| 10 Offer help in financing conservation programs | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| 11 Encourage the removal of disincentives | * | | | | | | | | | ✓ | | | |

Available Mechanisms

- 1 California Urban Water Conservation Council
- 2 Water Rights Permit conditions
- 3 Legislative changes to State Water Code
- 4 CVP/SWP contract provisions
- 5 Low interest loans or other financial assistance
- 6 Tax credits and rebate programs
- 7 Technical and/or planning assistance
- 8 Water use tax or non-compliance fee
- 9 Bond pooling
- 10 Water shortage contingency planning
- 11 Drought Water Bank conditions
- 12 Conditions for transfers of marketed water
- 13 Conservation Certification Process

- ✓ = mechanism directly meets objective
 - *
- = objective is an indirect result of mechanism